

SPECIFICATIONS FOR

Residential Decks

This Information Bulletin describes the minimum requirements for obtaining a building permit for an attached or detached deck accessory to a single-family dwelling or a duplex. The information bulletin cannot be used for decks closer than 5 feet from a property line or when heavy concentrated loads such as equipment or a hot tub are placed on the deck. The information and sample drawings provided herein are suitable as a guide and cannot be used for construction.

Project specific construction plans must be drawn and provided for review.

WHEN IS A PERMIT REQUIRED?

A building permit is required for any residential deck that exceeds 200 square feet in area, when located more than 30 inches above grade at any point, when attached to a dwelling, or when it serves as the main exit door.

SUBMITTAL REQUIREMENTS

A. Forms 1. General Application

A General Application form (DS-3032) must be submitted.

2. Owner-Builder Verification Form

This form is required if the property owner is acting as the general contractor. If you are not a licensed contractor and intend on performing the work yourself or hiring licensed subcontractors, an Owner-Builder Verification form (DS-3042) must be completed and submitted with your project documents.

3. Water Meter Data Card

A Water Meter Data Card (DS-16) must be completed if new plumbing fixtures are being added. This form is not required when replacing or relocating existing fixtures.

B. Plans

Plans must be drawn to scale and be of sufficient clarity to indicate the location, nature and extent of the proposed work. Existing and proposed construction should be clearly shown. Plans must show that all work conforms to the provisions of the current edition of the California Residential Code (CRC), Zoning Ordinances and all other relevant laws, ordinances and regulations applicable in the City of San Diego.

1. Site Plan and Vicinity Map (See Figure 1)

See Information Bulletin 122 for detailed information. See Figure 2 for the required setback when deck is located on a sloping site.

2. Types of Plans

Plans for decks shall be in accordance to one of the following:

- a. Project-specific construction plans and framing system determined in accordance with this Information Bulletin. To facilitate plan review also mark on the bulletin the selected structural framing sizes such as decking, joists, beams, posts, foundation, etc.
- b. Engineered framed deck plans and design calculations. The plans should include deck framing plan, foundation plan, elevations, cross sections, connection details,

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City of San Diego · Information Bulletin 211 July 2020 3. Overall Plan

> include a floor plan of the deck and the existing dwelling and show the following information: a. The use and dimensions for all rooms in the building opening onto the deck.

> b. The location and size of all windows and doors opening onto the deck from those c. The location of main exit door to the dwelling.

When the deck is proposed to be attached or located directly adjacent to an existing dwelling.

4. Deck Framing (See Figure 3)

- a. Framing members: i. Decking and nailing (See Table F)
- ii. Size of joists and beams (See Table A, B, and C)
- iii. Joist connection over beams (See Table F)
- iv. Joist hung from ledgers (See Figure 8 Case 1)
- v. Size of posts based on the maximum heights (See Table D)

vi. Post footing and connection (See Table E, Figure 6) b. Lateral Bracing:

- i. Conventional diagonal bracing member and connection to beam and post, or decorative-diagonal bracings with an equal of the net area and (See Figure 4,
- ii. Hold-downs at end of attached deck to existing dwelling (See Figure 11)
- iii. Additional diagonal bracing for detached deck parallel to exterior wall of existing dwelling (See Figure 8 Case 2)
- Stair Handrails (See Figure 7)
- Handrail is required at least on one side of stairs with four or more risers. The required handrall shall be one of the following types: i. Handrails with a circular cross section shall have an outside diameter of at
- least 1.25 inches and not greater than 2 inches. ii. If the handrail is not circular it shall have a perimeter dimension of at least 4
- inches and not greater than 6.25 inches with a maximum cross section dimension of 2.25 inches. Edges shall have a minimum radius of 0.01 inch.
- Guards shall be provided along the open side of a deck or stairs that are located more than 30 inches above grade below. Guards shall be not less than 42" high, and openings in guards shall not allow passage of a sphere 4 inches in diameter. (see Figure 5, 9 and 10).

ADDITIONAL REGULATIONS

A. Smoke Alarms Deck when attached to a house or when modifying the exterior wall of the house, smoke alarms within the house are required per sections R314 of the California Residential Code (CRC).

B. Very High Fire Hazard Severity Zone (VHFHSZ)

When a deck is attached to an existing house that is in a VHFHSZ and the building permit application for the existing house was deemed complete on or after 8/27/2009, or any detached deck located in a VHFHSZ, the material and method of construction used for the deck shall comply

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City of San Diego · Information Bulletin 211 Page 3 July 2020 with the requirements specified in CRC, section R337, as amended by San Diego Municipal Code (SDMC) Section 55,9401. https://www.sandiego.gov/fire/services/brush/severityzones C. Brush Management Zone When a deck is encroaching or located within Brush Management Zones it shall comply with the

City of San Diego's Landscape Regulations, SDMC Section 142.0412. D. Zoning and Planning Regulations The following regulations typically apply to residential deck additions. Please consultthe City of San Diego's Land Development Codes for all zoning regulations that may apply to your project.

SDMC Section Residential Base Zones 131.0401 Planed Districts-----151.0101 Brush Management ------142.0403 Landscape -----142.0401 Environmentally Sensitive Lands 143.0101 Overlay Zones ------132.0101

E. HISTORICAL REVIEW 1. Historical Review - Designated Historic

If the project involves any parcel containing designated historical resource, or is located within the boundaries of an adopted historic district, plans will be required and shall be submitted for Historical Review. Please refer to Information Bulletin 581, "Designated Historical Resource Review" for additional Historic Review information.

2. Historical Review - Potential Historic Resource

If the site contains buildings or structures 45 years old or older, and the scope includes any exterior work (except in-kind roof repair and replacement), plans and other information will be required and shall be submitted for Historical Review. (For other potential historic review exemptions, see Municipal Code Section 143.0212).

Because of a commitment to consider public information in the review of projects 45 years old or older, there is no over-the-counter review. The length of this review will typically be ten business days. See Information Bulletin 580, "Potential Historical Resource Review" for supplemental submittal requirements.

OPTIONS FOR REVIEW PROCESS A. SUBMITTED REVIEW

Most projects are reviewed through the Submitted Review process. Please refer to Section 2A of the Project Submittal Manual for requirements related to the submitted process.

B. OVER-THE-COUNTER REVIEW (OTC)

Plans for decks when using this information bulletin for structural and fire-life-safety requirements may be reviewed over-the-counter. The OTC review can be done as follow: a. By Appointment, to schedule an appointment, call (619) 446-5300.

b. For Walk-in service, visit Check - In counters of the Development Services Department

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City of San Diego · Information Bulletin 211 Page 4 July 2020 c. Decks containing unusual design features and framing irregularities must be designed by a registered design professional (licensed architect or civil engineer) and may not qualify for an OTC review. Note: Appointments are strongly encouraged. Walk-in service is subject to staff availability and assigned on a first-come, first-served basis. PROJECT FEES Refer to Information Bulletin 501, "Fee Schedule, Construction Permits - Structures" for all applicable fees.

INSPECTIONS For inspection requirements, refer to Information Bulletin 120.

Documents Referenced in this Information Bulletin

- 2019 California Residential Code (CRC) Land Development Code, (LDC)
- San Diego Municipal Code, (SDMC) Project Submittal Manual, Section 2A
- Information Bulletin 501, Fee Schedule Construction Permits Structures Information Bulletin 580 , Potential Historical Resource Review
- Information Bulletin 581, Designated Historical Resource Review
- Water Meter Data Card, DS-16 Inspection Record Card, DS-1798
- General Application, DS-3032 Owner-Builder Verification, DS-3042

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City of San Diego · Information Bulletin 211 July 2020 TABLE A - ALLOWABLE SPAN FOR DECK JOISTS (ft. - in.) 1,2,3 Douglas fir - larch #2 Redwood #1

Live load = 60 psf, Dead load = 10 psf, L/△ = 360.

2. If Joists within 8" inches of grade, use Pressure - Treated Douglas Fir - Larch or foundation - Grade

Redwood.

3. Include incising factor (Ci= 0.8)

TABLE B - CANTILEVER LENGTH FOR DECK JOISTS (ft. - in.)1,2,5

Size	Spacing (in.) ^{3, 4}					
SIZC	12	16	24			
2x6	1-0	0-10	0-9			
2x8	1-7	1-6	1-5			
2x10	2-5	2-2	2-0			
2x12	3-2	2-10	2-3			

Live load = 60 psf, Dead load = 10 psf, L/Δ = 240 Beam cantilevers are limited to the adjacent beam's span divided by 4. Joist spacing for diagonal decking shall not exceed 16 inches. Cantilever span includes 220 lbs. point load applied to end.

Solid blocking shall be provided between joists at the support.

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City of San Diego · Information Bulletin 211 TABLE C - DECK BEAMS

Beam span lengths (ft.- in.)^{1, 2, 3, 4, 6, 7}

Curation	Size (5)	Joist span less than or equal to: (8)						
Species	Size	6 ft.	8 ft.	10 ft.	12 ft.	14 ft.	16 ft.	18 ft.
	3 x 6 or 2 - 2 x 6	3-9	3-3	3-0			-	-
Douglas Fir - Larch #2	3 x 8 or 2 - 2 x 8	4-9	4-3	3-9	3-5	3-2	-	-
	3 x 10 or 2 - 2 x	5-10	5-2	4-7	4-3	3-10	3-7	3-4
	3 x 12 or 2 - 2 x	6-10	5-11	5-3	4-10	4-6	4-3	4-0
	4 × 6	4-6	3-10	3-5	3-3	1.		-
	4 x 8	5-11	5-2	4-7	4-3	3-10	3-9	3-5
Redwood #1	4 x 10	7-0	6-2	5-4	4-10	4-6	4-3	3-10
	4 x 12	8-2	7-1	6-4	5-8	5-3	4-10	4-7
	3 - 2 x 6	5-3	4-9	4-3	3-10	3-7	3-4	3-2
	3 - 2 x 8	6-9	6-0	5-3	5-0	4-7	4-3	4-0
	3 - 2 x 10	8-6	7-5	6-7	5-8	6-0	5-3	5-0
	3 - 2 x 12	9-10	8-6	7-8	7-0	6-5	6-0	5-8

- 1. Live load = 60 psf, Dead load = 10 psf, L/Δ = 360 at main span.
- 2. Beams supporting deck joists from one side only. See footnote (8) below for beams supporting cantilevered
- Beam depth shall be greater than or equal to depth of joists with a flush beam condition.
- 4. Beams within 8" of grade shall be Pressure-Treated Douglas Fir-Larch or Foundation Grade Redwood. 5. Beams plies shall be fastened with two rows of 10d threaded nails or #10d nails at 16" on center along the
- 6. Beams are permitted to cantilever not more than one-fourth of the span.
- 7. Include incising factor (Ci = 0.8) Beams supporting cantilevered joists:
- To select a joist span from Table, use span length equal to joist span length + 125% of cantilevered length. (Example: Joist with 12 ft. span & 3 ft. cantilevered length, calculated joist span = 12'+125% X (3') = 15.75' therefore, beam allowable span shall be based on 16' joist span).

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City of San Diego · Information Bulletin 211 TABLE D - DECK POST 1.2 Maximum Height (3) Post Size 4'-10" (4) 4×4 4 x 6 7'-0" 10'-0" 6 x 6 14'-0" Deck loads: Live load = 60 psf, Dead load = 10 psf Species: Douglas Fir-Larch #1, or Redwood #1 Measured to the underside of the beam. Maximum permitted height is 5'-8" when supporting one and two-ply beams. TABLE E-SQUARE FOOTING AT POSTS (INCHES)1 Tributary Area (sq. ft.) (5)

Dimensions		_						
	20	40	60	80	100	120	140	160
Width (in.)	12	18.	21	25	28	30	33	35
Depth (in.)	8	8	10	10	12	12	14	16
 Concret Footing 	e strength n	#4 @ 12" eac ninimum 2,5 sed on 1,500	h way at bo 00 PSI. PSF allowat	ttom. de soil bear	ing pressure	e.	surface	

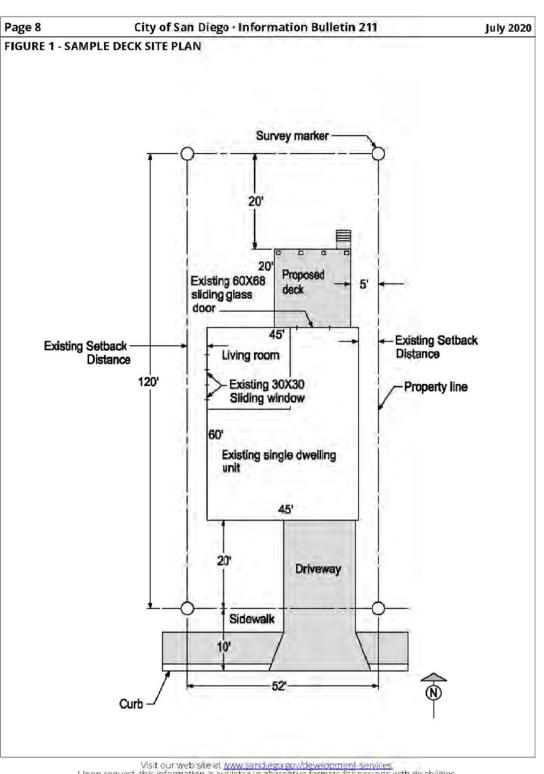
TABLE F - NAILING SCHEDULE FOR DECKS1,3

Connection	Nails or Screws (Box or Common)		
Joist to Girder	3-8d common nails		
2 inches nominal thickness spaced decking boards approximately 1/8" apart (2)	2-8d threaded nails or 2 #8 screws		

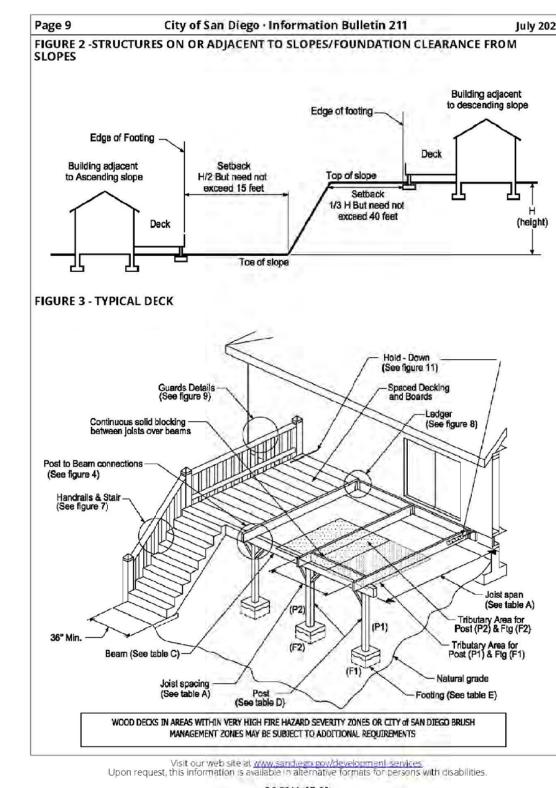
Decking placement may range from an angle perpendicular to Joists to an angle of 45 degrees to the joists. Each segment of decking must bear on minimum of 3 Joists.
All fasteners and connectors shall be hot-dipped galvanized or stainless steel.

Decking within 8 inches of grade shall be Pressure-Preservative treated lumber or foundation- Grade redwood.

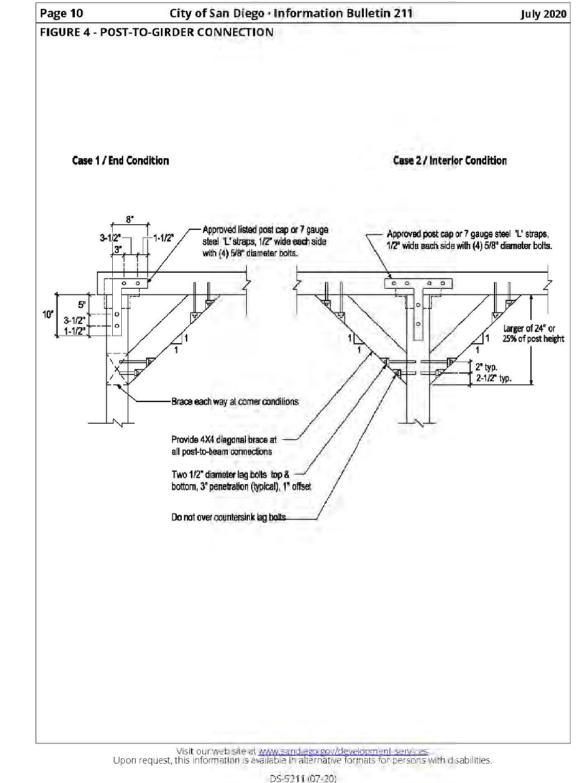
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SPECIFICATIONS: RES. DECKS - IB 211 - A

PROJECT NAME -

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